

REMARKS

Claims 1, 3-19, 21-24, and 26-28 are now pending in the application, of which Claims 14-18 have been withdrawn from consideration. Claims 1-13 and 19-29 stand rejected. Claim 25 has been cancelled; Claims 1, 19 and 28 have been amended. Support for the amendments can be found throughout the application, drawings and claims as originally filed and, as such, no new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-13 and 19-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable Applicants' disclosure of the prior art in view of Stahara et al. (U.S. Pat. No. 5,273,246; hereinafter "Stahara"). This rejection is respectfully traversed.

Initially, with regard to the Office's implied request for evidence that the claimed relationship between the dimensions of the flange and the sheet metal are patentable distinctions, Applicants note that the dimensions of the flange and sheet metal enable the formation of a weld bracket that ensures a proper weld while preventing burn through of sheet metal (see at least paragraph [0005] of the instant application). Further, Applicants note that the proper test for evaluating prior art under 35 U.S.C. § 103 is whether or not the prior art, either individually or taken together, can be seen as suggesting the Applicant's solution to the problem which the invention addresses. Rosemont, Inc. v. Beckman Instrument, Inc. 732 F.2d 1540, 1546, 221 USPQ 1, 7 (Fed. Cir. 7.984). As will be discussed herein, none of the cited prior art, including Applicants'

specification, suggests the solution to the problem Applicants' claims address – a weld bracket that ensures a proper weld to a thin sheet metal surface while providing a weld bracket having a thickness which is greater than the thickness of the base material.

With regard to Stahara, Applicants note that Stahara discloses a weld bracket B that has diverging sides 46, welding pad support legs 48 and welding pads 50. The welding pads 50 flare outwardly from the welding pad support legs 48 at an angle of 110 degrees, while the diverging sides 46 flare outwardly from a front surface 44 at an angle of 60 degrees. A weldment is formed on a **perimeter** of the welding pad 50 (see at least Col 4, lines 64-67). In particular, Stahara discloses, as illustrated in Fig. 1, that the welding pads 50 have a thickness less than the thickness of the base material. In contrast, independent Claim 1 has been amended to recite:

...a sheet metal surface having a first thickness;
a body portion having a second thickness **greater than the first thickness**;
a flange portion, **having the second thickness**,
coupled perpendicular to the body portion, said flange portion having a depth being a multiplication factor times the first thickness...(emphasis added)

Independent Claim 8 contains the limitations:

...a weld bracket having a body portion having a second thickness and a flange portion, said flange portion having a depth which is a multiplication factor of the first thickness;
a weldment portion disposed between a majority of the flange and the sheet metal base, wherein **said second thickness is greater than the first thickness**; and
wherein the flange portion is coupled perpendicular to the body. (emphasis added)

Further, independent Claim 19 has been amended to recite:

...a metal base having a first thickness;
a bracket formed of sheet metal having a second thickness **greater than the first thickness**, said bracket having a flange having a depth which is a multiplication factor times the first thickness of the metal base...(emphasis added)

Independent Claim 28 has been amended to recite:

a metal sheet having a first surface, a second surface **having a first** thickness;
a metal weld bracket having a body portion and a flange portion attached to said body portion at substantially a right angle, said flange portion and said body portion having a thickness **greater than the first thickness and** no greater than 5 mm...(emphasis added)

In view of the above discussion, Applicants respectfully assert that neither Applicants' specification nor Stahara, singly or jointly, teach, suggest or disclose each and every element of Claims 1, 8, 19 and 28, and thus, Applicants respectfully submit that the combination of references cited by the Office does not present a *prima facie* case of obviousness. The establishment of a *prima facie* case of obviousness requires that three basic criteria be met: 1) that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings; 2) that there must be a reasonable expectation of success; and 3) that the prior art reference or references must teach or suggest all the claim limitations. See, e.g., *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *Id.*

Furthermore, to imbue one of ordinary skill in the art with knowledge of the invention in suit, *when* no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (citing W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

Further as discussed in previous Office Actions, Applicants respectfully assert the prior art discussed in Applicants' specification does not teach, suggest or disclose a **weldment along a majority of a flange portion** attaching the flange portion of the weld bracket to the sheet metal surface or where the depth of the flange portion is a **multiplication factor times the thickness of the sheet metal**, with the multiplication factor being equal to or greater than the first thickness of the sheet metal surface plus the second thickness of the bracket material and being less than or equal to 5. The prior art discussed in Applicants' specification is silent as to the weld formed by the prior art weld bracket, and states that the problem associated with the prior art weld bracket is the damage imparted to the sheet metal surface due to the inability of the prior art weld bracket to properly weld to the sheet metal surface.

Stahara does not remedy these shortcomings of the prior art discussed in Applicants' specification. Specifically, Stahara does not teach, suggest or disclose whatsoever a weldment **of a flange portion** attaching the flange portion of the weld bracket to a thin sheet metal surface or where the depth of the flange portion is a **multiplication factor times the thickness of the sheet metal**, with the multiplication

factor being equal to or greater than the first thickness of the sheet metal surface plus the second thickness of the bracket material and being less than or equal to 5.

Applicants further note that modifying Stahara to employ a weld or weldment formed **along** a majority of a flange portion or **between** the flange and a sheet metal surface would improperly modify the intended use of the weld bracket of Stahara, and thus, is improper. Specifically, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (C.C.P.A. 1959) MPEP 2143.01. Butt welding is accomplished by welding “**around** the plane of abutment” (emphasis added, see at least Col. 2, lines 59-61). As Stahara specifically states that butt welding is employed to weld the weld bracket to the tank, modifying the weld bracket of Stahara such that the weld occurs along the body of the welding pad or between the welding bracket and the tank modifies the principle of operation of the welding bracket of Stahara and is improper.

Applicants further submit Stahara teaches away from forming a flange portion that is coupled perpendicular to a body portion as claimed. Applicants respectfully submit it is improper to modify the prior art discussed in Applicants’ specification with Stahara as Stahara teaches away from this modification. Specifically:

It is established that where references, instead of suggesting the invention, **seek or warn to avoid the suggestion**, such references diverge from and teach away from the invention at hand and it is error to find obviousness based on such references.

In re Fine, 837 F.2d 1071, 1074, 5USPQ2d 1596, 1599 (Fed. Cir. 1988) (emphasis

added). In this regard, Stahara teaches forming the welding pads at an angle with respect to the diverging sides. Stahara teaches that the welding pads and the retaining legs must be formed at an angle to facilitate the formation of a good weld between the weld bracket and the tank T. Stahara also teaches that the use of perpendicularly formed welding pads and retaining legs results in weaker welds as the operator is not able to access the full perimeter of the interior surface of the bracket to place the weld. Thus, modifying either the welding pads or the retaining legs of Stahara to be coupled perpendicular to a body portion would be improper as Stahara teaches that this configuration results in an undesirable (i.e. weaker) weld. In view of this, Applicants submit that one skilled in the art would not be motivated to combine the Stahara reference with the prior art discussed in Applicants' specification.

Accordingly, in view of the above discussion, Applicants respectfully assert the Office has not presented a *prima facie* case of obviousness and as such, Applicants respectfully request the Office to reconsider and withdraw the rejection of Claims 1, 8, 19 and 28 under 35 U.S.C. § 103(a).

With regard to Claims 3-7, 9-13, 20, 21, 24, 26 and 27, Applicants note these claims depend directly or indirectly from either independent Claims 1, 8 or 19 and, thus, should be in condition for allowance for the reasons set forth for Claims 1, 8 and 19 above. Accordingly, Applicants respectfully requests the Office reconsider and withdraw the rejections of Claims 3-7, 9-13, 20, 21, 24, 26 and 27 under 35 U.S.C. § 103(a).

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: Aug 15, 2007

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